

REMARKS

Claims 1-7 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. More specifically, the Examiner asserts that the claims do not clearly point out the “mechanism” for fixing said flexible pipe. In response, Applicants amended claims 1-2 to clarify that the mechanism fixes the vacuum pump so as not to shrink the flexible pipe at the time of evacuation, and respectfully request withdrawal of the §112 rejection for this reason.

Claims 1-7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s Admitted Prior Art (AAPA) in view of Sweeny (U.S. Patent No. 1,559,804), and further in view of Elliotte (U.S. Patent No. 2,663,894). Applicant traverses the rejection because there is no motivation to combine the references.

The Sweeny and Elliotte references relates to cleaners, and do not disclose or teach suppressing transmission of vibration from a vacuum pump to a vacuum chamber at a time of evacuation.

In addition, the Examiner considers pipe 24 of Sweeny as corresponding to the flexible pipe of the present invention. However, the pipe 24 of Sweeny is not a flexible pipe, but instead a vertical rod 24. (See page 2, line 98 of Sweeny). Accordingly, a mechanism for fixing the vacuum pump so as not to shrink the flexible pipe at the time of evacuation can not be conceived by using the vertical rod 24 of Sweeny, since there is no flexible pipe.

With respect to Elliotte, the Examiner asserts that Elliotte teaches supporting the flexible hose 59 with sturdy beam 62 and chains 103 and 105 so that the mechanism can be conceived. However, in Elliotte, the flexible hose 59 is attached to the tip of the truck and absorbs movement of a vacuum and the cleaner. Therefore, it is unnecessary to consider suppressing any transmission of vibration from the pump. For this reason, Applicants respectfully submit that Elliotte does not disclose or teach suppressing vibration, as in the present application. The sturdy beam 62 of Elliotte merely supports the discharge duct attached to the screen body, and therefore, Applicants respectfully submit that the mechanism can not be conceived based on the sturdy beam.

Similarly, the chains 103 and 105 merely prevent the problem of a wheel falling into ruts or the like, and therefore, the mechanism can not be conceived from the chains. For at least these reasons, the rejection should be withdrawn.

Furthermore, MPEP 2141.01(a) teaches that a reference must either be in the field of Applicant's endeavor or, if not, then reasonably pertinent to the particular problem of which the inventor was concerned, citing *In re Oetiker* 977F. 2d 1443, 1446, 24 U.S.P.Q. 2d 1443, 1445 (Fed. Cir. 1992). The Sweeny and Elliotte references are not in Applicant's field of endeavor, namely a vacuum processing apparatus that evacuates a vacuum chamber, which is the same field as AAPA. That is, a vacuum processing apparatus for bonding substrates of a liquid crystal display device. Instead, Sweeny is directed to an air induction cleaning apparatus or vacuum cleaner. Elliotte is directed to an industrial vacuum device attachable to a motor truck, which removes leaves and debris

from a street or the like. Accordingly, since these references refer to different processes from each other, as well as to different processes than the present invention, there is no motivation to combine the references with AAPA.

Sweeny is also not reasonably pertinent to the particular problem with which the inventor of the present invention was concerned. The object of the present invention is to provide a vacuum processing apparatus having a mechanism for suppressing the transmission of vibration from the vacuum pump to the vacuum chamber. Generally, vibration of the vacuum pump is transmitted to the vacuum chamber due to the fact that a flexible pipe connecting the vacuum pump and the vacuum chamber is shrunk and loses flexibility, which prevents the flexible pipe from suppressing the transmission of vibration. The present invention advantageously prevents shrinking of the flexible pipe, and therefore suppresses vibration being transmitted to the vacuum chamber. (See Applicant's specification, lns. 21-33). Sweeny is silent regarding the problem of vibration between a vacuum pump and a vacuum chamber. This is because Sweeny is concerned with improvements in vacuum cleaning, and not in manufacturing an LCD device with a vacuum processing apparatus.

Elliotte similarly suffers from the same deficiencies as Sweeny. More specifically, Elliotte is directed to an industrial device as attached to a motor truck for external use outside of a factory or the like. Elliotte is also silent regarding minimizing vibration between a vacuum pump and a vacuum chamber. Indeed, the chains 103 connecting the lever 102 to the wheel 65 of Sweeny are not even designed to prevent

flexing of the flexible pipe 59. Instead, the chains 103 merely prevent the problem of the wheel 65 falling into ruts or the like. (See col. 4, ln. 73 to col. 5, ln. 2).

In contrast, the present invention is directed to factory equipment for aligning substrates of a LCD device. Since neither Sweeny nor Elliotte are concerned with the problem of the present invention, namely reducing vibration between a vacuum pump and a vacuum chamber, or in Applicant's field of endeavor of vacuum devices with vacuum chambers, and also for the reasons above, Applicant respectfully requests withdrawal of the §103 rejection of claims 1-7.

For all of the foregoing reasons, Applicants submit that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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